

**REMARKS**

Applicant has reviewed the Office Action mailed on July 26, 2006 as well as the art cited. Claim 8 has been amended. Claims 1 and 8 have been amended. Claim 10 has been canceled. Claims 1, 2, 4-9 and 11- 70 are pending in this application.

**Rejections Under 35 U.S.C. § 103**

Claims 1, 2 and 4 were rejected under 35 USC § 103(a) as being unpatentable over Murdock (U.S. Patent No. 6,301,225) in view of Jones et al. (U.S. Patent No. 4,633,246) and Ogawa (U.S. Patent No. 5,345,437).

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. MPEP 2143 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

When applying 35 U.S.C. §103, the claimed invention must be considered as a whole; the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention and a reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

**Claim 1**

Independent claim 1 is as follows:

1. (Currently amended) A protection switching mechanism comprising:

a multiplexer having an input coupled to receive an input signal and a plurality of outputs to output a plurality of output signals;

a transmission path for each output of the multiplexer, each transmission path coupled to receive an associated output signal from the multiplexer, the transmission paths further including one or more redundant transmission paths, wherein signals directed to a faulty transmission path are redirected to an associated redundant transmission path; [and]

a remote circuit to selectively switch a redundant transmission path for a faulty transmission path at a subscriber[.]; and

wherein the transmission paths are selected into groups comprising a plurality of standard transmission paths and a redundant transmission path, wherein the redundant transmission path is selectively coupled to replace a faulty transmission path among the standard transmission paths.

Claim 1 has been amended to correct a typographical error. The Applicant respectfully traverses the rejection of the Examiner of independent claim 1 under section 103. Neither the Murdock, Jones nor the Ogawa reference alone or in combination teach or suggest all of the claim limitations in claim 1. For example, none of the prior art references teach or suggest the aspect “wherein the transmission paths are selected into groups comprising a plurality of standard transmission paths and a redundant transmission path, wherein the redundant transmission path is selectively coupled to replace a faulty transmission path among the standard transmission paths.” The Examiner mistakenly cites the Ogawa reference as teaching this aspect. However, the Ogawa reference relates to frequency multiplexing modems that communicate over a single path (not multiple paths) via channels A, B, C and S that are at different frequencies. See Figure 3A and Column 3, lines 20-28 of the Ogawa reference. Hence, the Ogawa reference does not teach the grouping of transmission paths into “a plurality of standard transmission paths and a redundant transmission path” as is claimed in claim 1 of the present application. Even if one was to mistakenly associate channels to transmission path, the S channel (secondary channel) in the Ogawa reference is used to communicate information regarding an abnormal channel. Column 3, lines 39-45 of the Ogawa reference. It is not used as a redundancy channel for an

abnormal channel. Moreover, if the path (only one path in the Ogawa reference) is broken none of the channels A, B, C or S will work. Hence, if one was to mistakenly associate channels to transmission paths, the Ogawa reference would actually teach away from using a redundancy path. Accordingly, since neither the Murdock, Jones nor the Ogawa reference alone or in combination teach every limitation of claim 1 the rejection of claim 1 under section 103 is improper.

Therefore the Applicant respectfully requests the withdrawal of the rejection of claim 1 under section 103. Moreover, the Applicant respectfully requests the withdrawal of the rejection to all claims that dependant from claim 1 since these dependant claims further define patentably distinct claim 1. Since the Applicant believes these claims are allowable for the above reason a response to all rejections to said dependant claims may not have been provided in this response. The Applicant, however, retains the right to address said rejections if a further response is required.

Claims 8, 9, and 47 were rejected under 35 USC § 103(a) as being unpatentable over Murdock (U.S. Patent No. 6,301,225) in view of Jones et al. (U.S. Patent No. 4,633,246) and Cadieux et al. (U.S. Patent No. 5,581,228).

**Claim 8**

8. (Currently amended) A protection switching mechanism comprising:
- a multiplexer having an input coupled to receive an input signal and a plurality of outputs to output a plurality of output signals;
  - a transmission path for each output of the multiplexer, each transmission path coupled to receive an associated output signal from the multiplexer, the transmission paths further including one or more redundant transmission paths, wherein signals directed to a faulty transmission path are redirected to an associated redundant transmission path;
  - a remote circuit to selectively switch a redundant transmission path for a faulty transmission path at a subscriber; and

wherein the input signal is a digital signal 3 (DS3 signal) and the output signals are digital signals (DS1 signals)[.];

a line unit for each transmission path to provide an asynchronous DS1 interface with the DSL; and

a remote unit for each transmission line to provide an interface from DSL back to DS1 at a customer's premise.

As illustrated above, the Applicant has amended independent claim 8 to include aspects indicated as being allowable in claim 10. Claim 10 has been accordingly canceled. Therefore, the Applicant respectfully request the withdrawal of the rejection of independent claim 8 and its dependant claims under section 103.

**Claim 47**

Independent claim 47 is as follows:

47. (Original) A method of operating a transmission path network, the method comprising:  
grouping a plurality of transmission paths with an associated redundant transmission path;  
coupling an output signal from a multiplexer addressed to a faulty transmission path in the group of transmission paths to the redundant transmission path; and  
coupling the redundant transmission path to replace the faulty transmission path at a subscriber.

The Applicant respectfully requests the withdrawal of the rejection of independent claim 47 under section 103. Neither the Murdock, the Jones nor the Cadieux references teach or suggest all the limitations of claim 47. For example, claim 47 includes the aspect of “grouping a plurality of transmission paths with an associated redundant transmission path.” The Examiner has failed to show any of the cited references teaching this aspect. Accordingly, the Applicant respectfully

**AMENDMENT AND RESPONSE**

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requests the withdrawal of the rejection of independent claim 47 and its dependant claims under section 103.

*Allowable Subject Matter*

Claims 11-46 and 57-70 were allowed

Claims 6, 7, 10 and 48-56 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

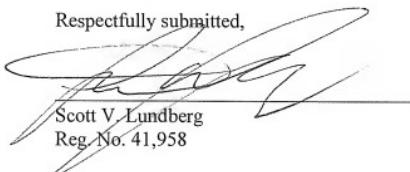
**CONCLUSION**

Applicant respectfully submits that claims 1-2, 4-9 and 11-70 are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 455-1690.

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Respectfully submitted,

  
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